

ABSTRACT

A subject for the invention is to provide an alkali-free glass which is capable of reducing or totally eliminating As_2O_3 and which has fewer bubble inclusion than that in the prior technology.

The invention relates to an alkali-free glass which comprises SiO_2 in an amount of from 40 to 70% by weight; Al_2O_3 in an amount of from 6 to 25% by weight; B_2O_3 in an amount of from 5 to 20% by weight; MgO in an amount of from 0 to 10% by weight; CaO in an amount of from 0 to 15% by weight; BaO in an amount of from 0 to 30% by weight; SrO in an amount of from 0 to 10% by weight; ZnO in an amount of from 0 to 10% by weight, each based on the total amount of said glass, and helium and/or neon in an amount of from 0.0001 to 2 $\mu\text{l/g}$ (0°C , 1 atm.).